Garden Warblers *Sylvia borin* in the southwestern Cape Province, South Africa

by C. G. C. Martin, G. D. Underhill & L. G. Underhill

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During winter, Garden Warblers *Sylvia borin* occur in bushes, thickets and forest edges in Africa south of the Sahara with the southern limit of the wintering range coinciding roughly with the boundaries of the Grassland Biome (Moreau 1972, Curry-Lindahl 1981, Maclean 1993). It thus avoids both the Fynbos Biome and the Karoo Biome of southern Africa, vegetation zones which, in their pristine state, consist mostly of low scrub and few trees (Rutherford & Westfall 1986), essentially unsuitable habitat for Garden Warblers (Maclean 1993).

In this note, we report the occurrence of three Garden Warblers at two localities 3.6 km apart near Durbanville (33°51′S, 18°38′E) in the suburbs of Cape Town. This locality is *c.* 600 km from the nearest point in the distribution of Garden Warblers as depicted by Maclean (1993). All three were mist-netted, ringed, measured, weighed and released (Table 1). One of us (CGCM) had ringed Garden Warblers in Malawi, and was present when each bird was caught. Colours of the bill and legs coincided with those described for Garden Warblers in Zimbabwe (Borret 1971). The identification of two was independently assessed from descriptions and measurements by R. K. Brooke; for one of the birds a photograph and a sample of feathers are available. The bird in the Durbanville Nature Reserve was trapped in a mist-net near a fig *Ficus carica* tree in fruit (Underhill 1992), and the two in the Tygerberg Nature Reserve near two species of taaibos (*Rhus rehmanniana* var. *uitenhagensis* and *Rhus laevigata* var. *incana*), indigenous trees 1.0–2.5 m tall, both in berry and dominant in the mist-netting area. Both nature reserves have suburban settings in which planted trees are abundant in gardens and along streets. Under natural conditions the area, including the nature reserves, would be treeless.

The only other record of a Garden Warbler in the southwestern Cape Province was made in dense riparian growth of indigenous trees in fruit *c.* 44 km east of Durbanville in late February 1985, but the bird "did not reveal itself sufficiently for positive identification" (Martin 1986, Hockey *et al.* 1989). However, the bird responded to a recording and "the call on the tape and the call of the bird were very similar". The observer knew the species well in Europe, and given the subsequent occurrence even further west, his conclusion "I have little doubt that it was a Garden Warbler" should be accepted (Martin 1986).

The common factor linking these four reports was the presence of trees bearing fruit. Garden Warblers are omnivorous, and especially at stopover sites during migration they eat fruit to rebuild fat reserves (Bairlein 1987, Thomas 1979).

TABLE 1
Description and measurements (mm) of Garden Warblers mist-netted in the southwestern Cape Province, South Africa

	1	2	3
SAFRING ring no.	A90904	AD21094	AD21112
Place	Durbanville Nat. Res.	Tygerberg Nat. Res.	Tygerberg Nat. Res.
Coordinates	33°51′S, 18°38′E	33°52′S, 18°36′E	33°52′S, 18°36′E
Date	22 December 1990	6 February 1993	27 February 1993
Wing-length	81	—[1]	80
Bill length (to featherline)	10	9	9
Bill colour	upper–grey lower–horn-grey	upper–brown lower–horn	upper–grey lower–brown
Tarsus	22	21	22
Legs	grey with bluish tinge	grey	greyish-brown
Tail	58	63	60
Eye	dark brown	brown	brown
Mass (g)	23.9[2]	19.0	20.0
Primary moult	no moult	555555441	no moult

[1]Longest primary in moult
[2]The value of 29.2 g in Underhill (1992) is incorrect

Hockey *et al.* (1989) listed 92 species with expanded ranges or increased population sizes in the southwestern Cape Province. Of these, 37 were attributed to the replacement of natural fynbos vegetation by alien trees, plantations and gardens. Amongst the best documented of these expansions is that of the Pied Barbet *Lybius leucomelas* (Macdonald 1986). The Garden Warbler thus may become the first Palaearctic migrant on the list of species whose range expansion in the southwestern Cape Province can be attributed, at least in part, to anthropogenic alteration of habitat structure.

Garden Warblers reaching southern Africa come mostly from the eastern part of the breeding range (Moreau 1972). Historically, the breeding range was to the west of the Yenisey River, Russia, but recently the species has spread eastwards across Krasnoyarsk Territory of central Siberia in areas of forest-steppe and the southern zones of the taiga, especially in the regrowth at disturbed sites (Rogacheva 1992). A possible factor contributing to an expansion in the winter range of the Garden Warblers is that man-induced changes in habitat in the breeding area are resulting in increased populations of Garden Warblers from Asia reaching southern Africa. A second possible contributory factor is that extended periods of drought during the 1980s in large areas of southern Africa have reduced the amount of food available in the traditional wintering areas. Drought-related movements of birds into the southwestern Cape (albeit from the arid western areas of southern Africa) have been recorded for several species; notably Dusky Sunbird *Nectarinia fusca*, Black-headed Canary *Serinus alario* and Namaqua Sandgrouse *Pterocles namaqua* (Schmidt 1978, Longrigg & Steele 1978, Hockey *et al.* 1989).

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References:

Barlein, F. 1987. The migratory strategy of the Garden Warbler: a survey of field and laboratory data. *Ringing & Migration* 8: 59–72.

Borret, R. P. 1971. Movements and moult in the Garden Warbler in Rhodesia. *Ostrich* 42: 141–142.

Curry-Lindahl, K. 1981. *Bird Migration in Africa.* Vols 1, 2. Academic Press.

Hockey, P. A. R., Underhill, L. G., Neatherway, M. & Ryan, P. G. 1989. *Atlas of the Birds of the Southwestern Cape.* Cape Bird Club, Cape Town.

Longrigg, T. D. & Steele, D. 1978. Dusky Sunbird *Cynnyris fuscus* irruption into the S.W. Cape. *Promerops* 135: 2–3.

Macdonald, I. A. W. 1986. Range expansion in the Pied Barbet and the spread of alien tree species in southern Africa. *Ostrich* 57: 75–94.

Martin, R. 1986. Suspected Garden Warbler in CBC area. *Promerops* 173: 11.

Maclean, G. L. 1993. *Roberts' Birds of Southern Africa.* John Voelcker Bird Book Fund, Cape Town.

Moreau, R. E. 1972. *The Palaearctic-African Bird Migration Systems.* Academic Press.

Rogacheva, E. V. 1992. *The Birds of Central Siberia.* Husum Druck- und Verlagsgesellschaft, Husum.

Rutherford, M. C. & Westfall, R. H. 1986. Biomes of southern Africa—an objective categorization. *Memoirs of the Botanical Survey of South Africa* 54: 1–98.

Schmidt, R. K. 1978. Namaqualand birds moving south owing to drought? *Promerops* 134: 3–4.

Thomas, D. K. 1979. Figs as a food source of migrating Garden Warblers in southern Portugal. *Bird Study* 26: 187–191.

Underhill, G. D. 1992. Garden Warbler *Sylvia borin* in the southwestern Cape Province. *Safring News* 21: 60.

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The reproductive strategies of edible-nest swiftlets (*Aerodramus* spp.)

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The Black-nest Swiftlet *Aerodramus maximus* and the White-nest Swiftlet *A. fuciphagus* are important commercially in south-east Asia as their nests are collected extensively for use in Chinese cuisine and medicine (see Kang *et al.* 1991). They are sympatric in many areas